APPENDIX A-MARKED VERSION

1.(Twice Amended) A control method for a magnetic disk drive having a processing unit controlling the magnetic disk drive, a magnetic head reading information on a magnetic disk medium, and an electronic circuit having a function to amplify said information read from said magnetic disk medium, a function to detect back electromotive force from a VCM actuator, a function to convert said back electromotive force detected as an analog value to a digital value, and a function to transfer said amplified readout information signal to said processing unit, the method comprising:

a first step of stopping the supply of electric power to the whole of or a part of said functions to amplify said information read from said magnetic disk medium and to transfer said amplified readout information signal to said processing unit;

a second step of moving said magnetic head by using said back electromotive force of said VCM actuator;

a third step of starting the supply of an electric power to the whole of or a part of said functions to amplify said information read from said magnetic disk medium and to transfer said amplified readout information signal to said processing unit;

a fourth step of again stopping the supply of an electric power to the whole of or a part of said functions to amplify said information read from said magnetic disk medium and to transfer said amplified readout information signal to said processing unit; and

a fifth step of [again] changing a direction of moving said magnetic head by using said back electromotive force of said VCM actuator.

2.(Amended) The control method according to claim 1, further comprising between said third step and said fourth step,

an additional step of amplifying said information read from said magnetic disk medium.

3.(Twice Amended) The control method according to claim 1, wherein the procedure from said starting the supply of an electric power to the whole of or a part of said functions to again stopping the supply of an electric power to the whole of or a part of said functions is repeated irregularly.

4.(Twice Amended) The control method according to claim 1, wherein the procedure from [the third step] starting the supply of an electric power to the whole of or a part of said functions to [the fifth step] again stopping the supply of an electric power to the whole of or a part of said functions is repeated according to a geometric series, an exponential function, or an elementary function, or is repeated with a period such that said seek velocity is kept at a constant value.

5.(Twice Amended) A control method for a magnetic disk drive having a processing unit which controls the magnetic disk drive, an MR head which reads information on a magnetic disk medium, a read-write IC which has a function to amplify the information read from the magnetic disk medium and a function to shut off a sense current to the MR head and to provide it to the MR head, and an electronic circuit which has a function to detect a back electromotive force from a VCM actuator, a function to convert the back electromotive force detected as an

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analog value to a digital value, and a read-write channel to transfer amplified

information to the processing unit, the method comprising:

a first step [in which] of shutting off the sense current [is shut off and] and

stopping electric power [is stopped] in the whole of or a part of the read-write IC and

the read-write channel;

a second step [in which] of moving the MR head [is moved] by using a back

electromotive force of the VCM actuator;

a third step [in which] of providing the sense current [is provided] and

supplying electric power [is supplied] to the whole of or the part of the read-write IC

and the read-write channel;

a fourth step [in which] of amplifying information read from the magnetic disk

medium [is amplified];

a fifth step [in which] of shutting off the sense current [is shut off] and

stopping electric power [is stopped] in the whole of or the part of the read-write IC

and the read-write channel; and

a sixth step [in which] of moving the MR head [is moved] in an opposite

direction to the previous direction by using the back electromotive force of the VCM

actuator.

6.(Amended) A magnetic disk drive, comprising:

a processing unit which controls the magnetic disk drive;

a magnetic head which reads information on a magnetic disk medium; and

an electronic circuit which has a function to amplify information read from the

magnetic disk medium, a function to detect a back electromotive force as an analog

value from a VCM actuator, a function to convert the back electromotive force detected as an analog value to a digital value, and a function to transfer the amplified information to the processing unit;

wherein the magnetic disk drive has:

a function to execute an idle seek operation by using the back electromotive force of the VCM actuator without amplifying the information read from the magnetic disk medium, and

a function to amplify, after the idle seek operation, the information read from the magnetic disk medium, to obtain information concerning the position of the magnetic head, and then to change the direction of the idle seek operation.

7.(Twice Amended) A magnetic disk drive, comprising:

a processing unit which controls the magnetic disk drive;

a magnetic disk medium;

a magnetic head which reads information on the magnetic disk medium; and

an electronic circuit which has a function to amplify information read from the magnetic disk medium, a function to detect back electromotive force [from] as an analog value from a VCM actuator, a function to convert the back electromotive force detected as an analog value to a digital value, and a function to transfer the amplified information to the processing unit;

wherein the processing unit can set a target velocity, the magnetic disk drive executes an idle seek operation by using the back electromotive force of the VCM actuator without amplifying the information read from the magnetic disk medium, and has a function to amplify, after the idle seek operation, the information read from the

magnetic disk medium, to obtain information concerning the position of the magnetic head, and then to calibrate a velocity of said idle seek position.

8.(Twice Amended) A [The] magnetic disk drive, [according to claim 7] comprising:

  a processing unit which controls the magnetic disk drive;

  a magnetic disk medium;

  a magnetic head which reads information on the magnetic disk medium; and

  an electronic circuit which has a function to amplify information read from the magnetic disk medium, a function to detect back electromotive force as an analog value from a VCM actuator, a function to convert the back electromotive force detected as an analog value to a digital value, and a function to transfer the amplified information to the processing unit;

  wherein the magnetic disk drive executes an idle seek operation by using the back electromotive force of the VCM actuator without amplifying the information read from the magnetic disk medium; and

  if the [magnetic disk drive has a] magnetic disk medium [having] has 8000 cylinders, then a direction of the idle seek is reversed when the magnetic head is in a range from the 0th cylinder to the 500th cylinder and in a range from the 7500th cylinder to the 8000th cylinder on the magnetic disk medium.

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